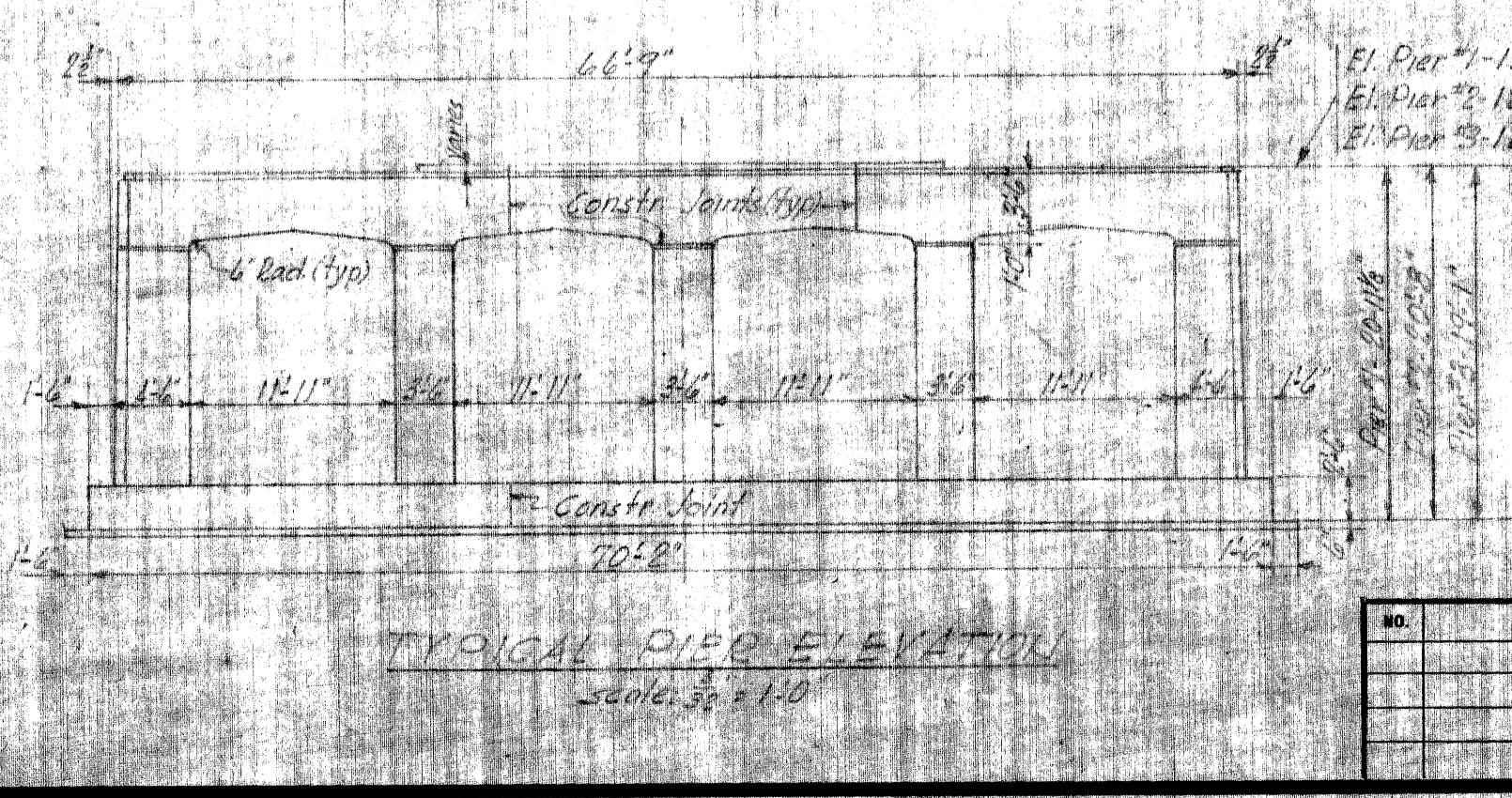
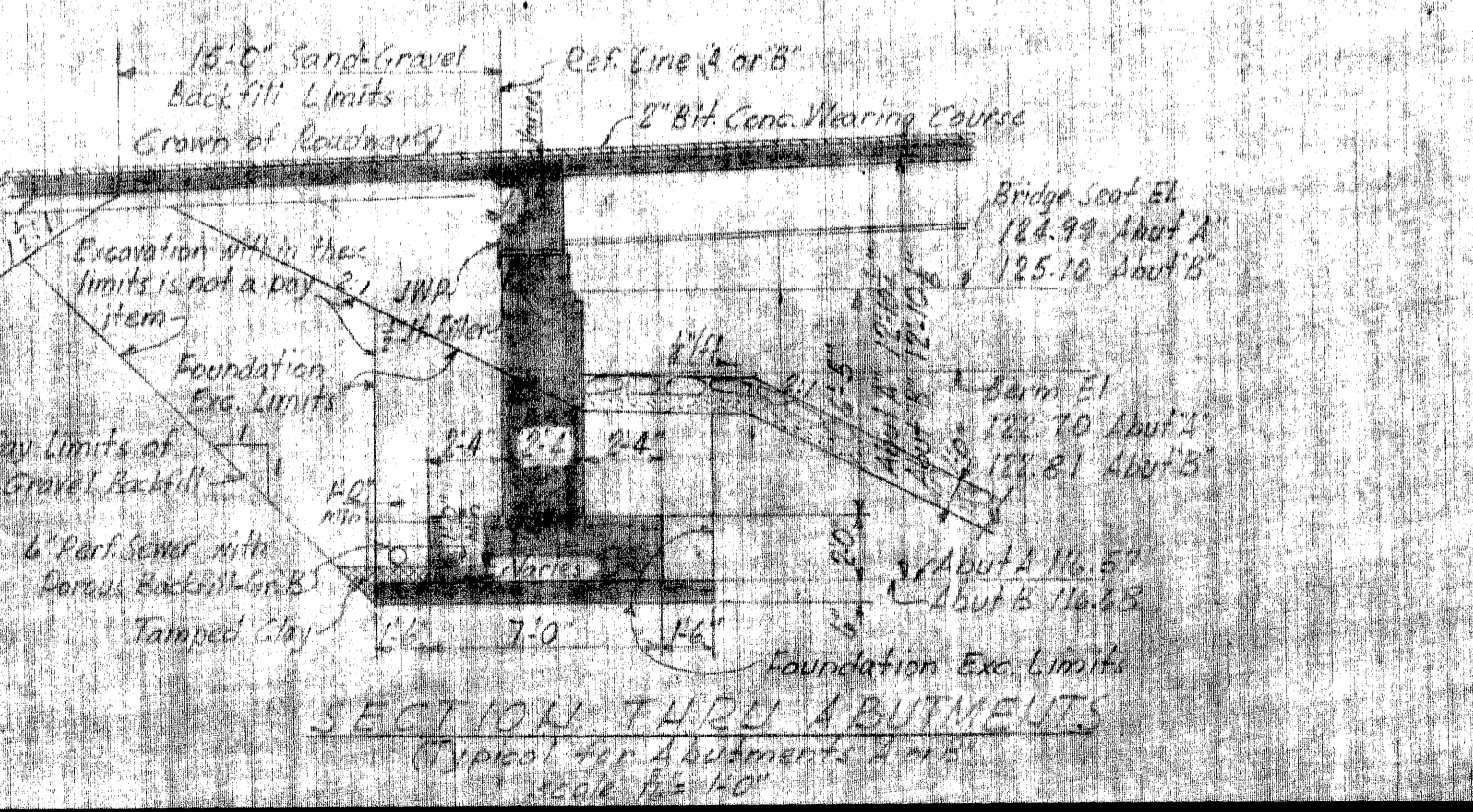
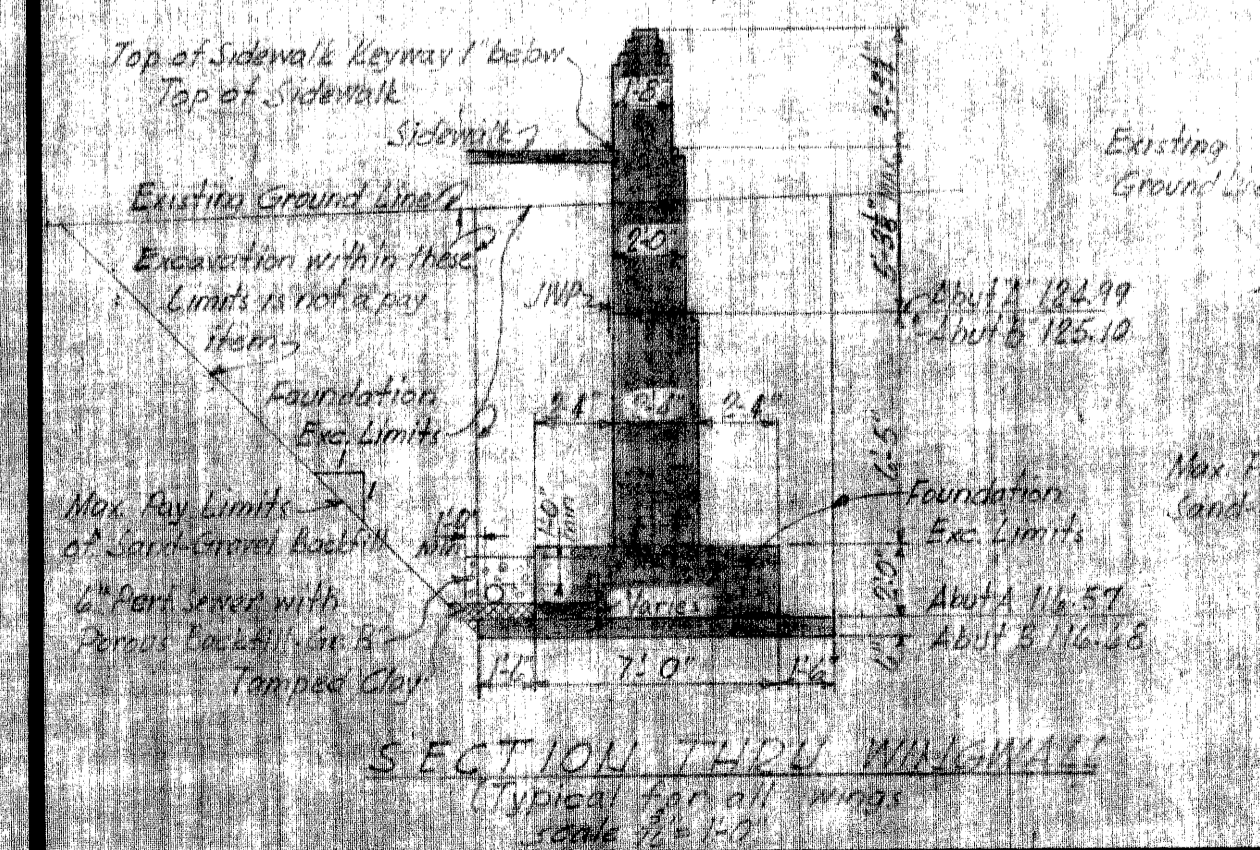
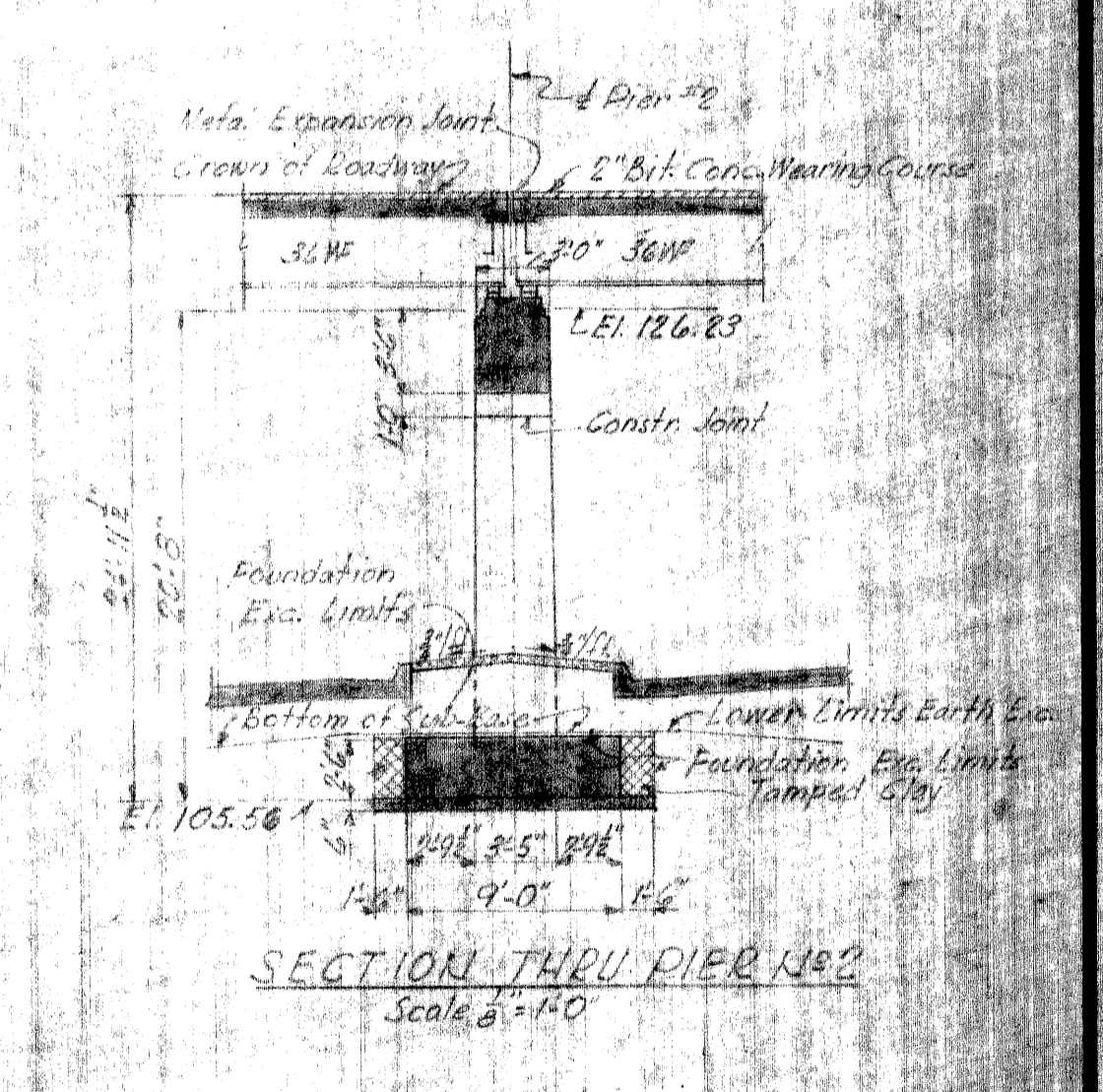
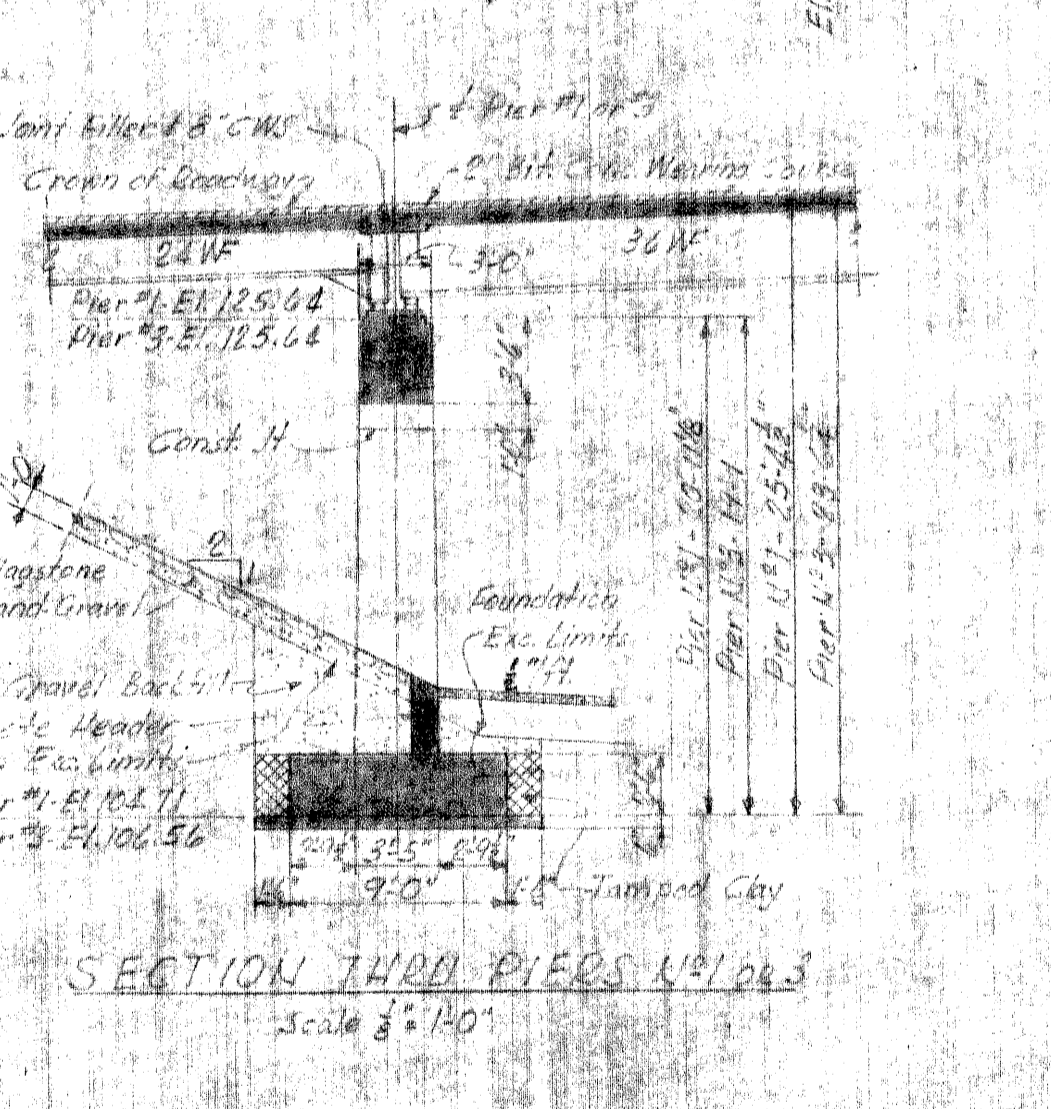
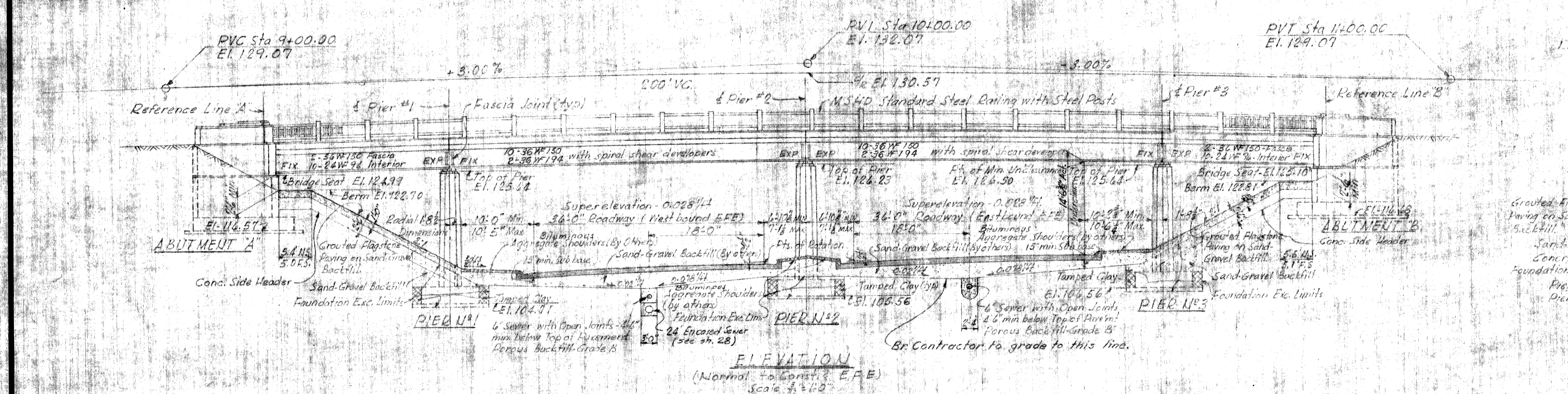


MISCELLANEOUS STRUCTURE QUANTITIES

ITEMS	UNIT	AMOUNT
GRADED FLAGSTONE PAVING	SQ. YDS.	410
SAND-GRAVEL BACKFILL	CU. YDS.	115
6" SEWER	LIN. FT.	192

NOTES:
 Proposed pavements, curb & gutter and sand-gravel sub base on the Expressway are not a part of this contract.



MICHIGAN STATE HIGHWAY DEPARTMENT
 CHARLES M. ZIEGLER
 STATE HIGHWAY COMMISSIONER
 THE EDEL FORD EXPRESSWAY CROSSING FRENCH ROAD IN THE CITY OF DETROIT
GENERAL PLAN OF STRUCTURE

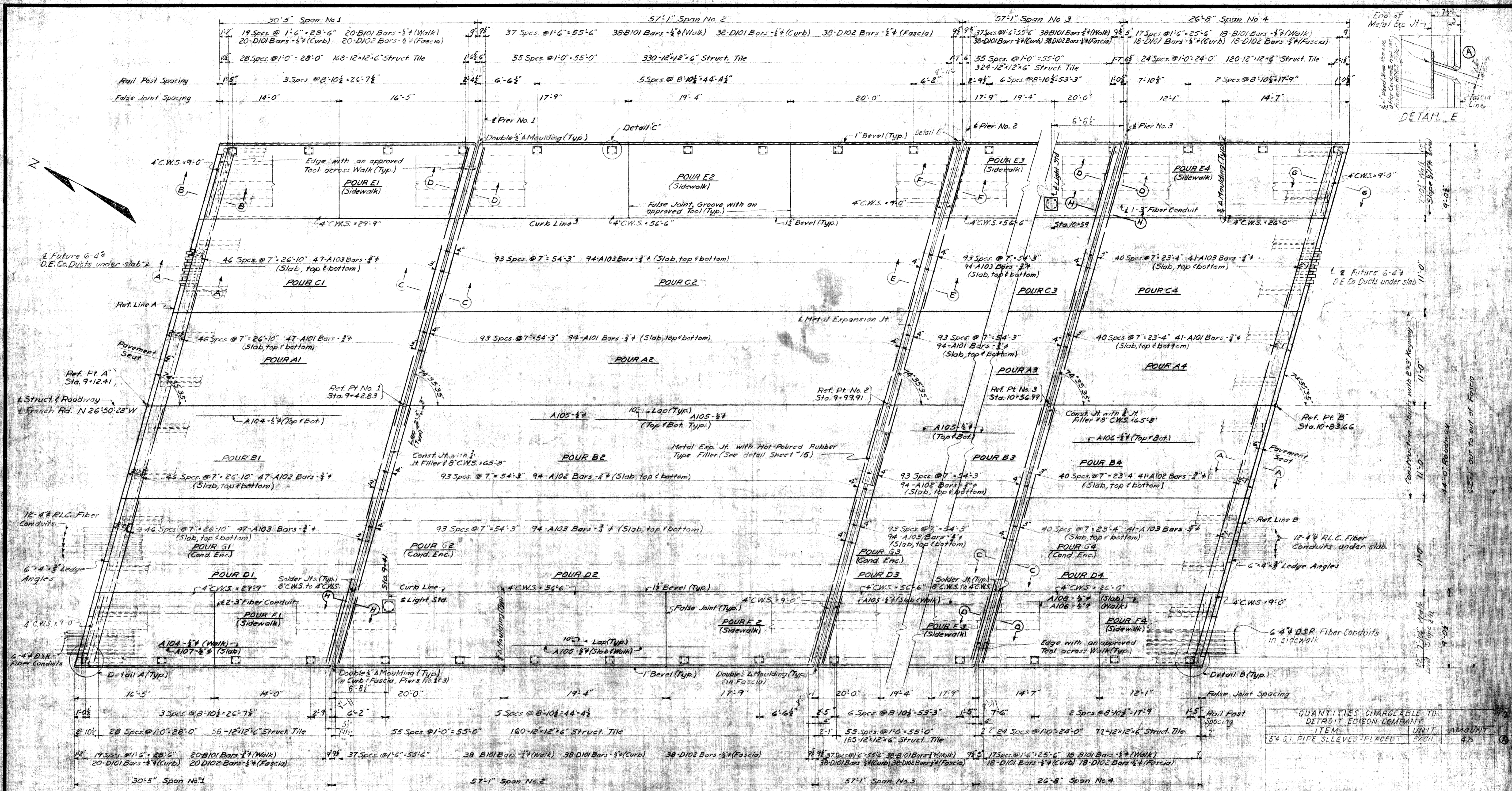
HAZLET & ERDAL - CONSULTING ENGINEERS - FILE NO. 785

APPROVED: *[Signature]* 4.23.56
 CHIEF BRIDGE DRAFTSMAN
 APPROVED: *[Signature]* 4.23.56
 MEMBER OF BRIDGE DESIGN
 APPROVED: _____
 BRIDGE ENGINEER

NO.	DESCRIPTION	DATE	BY

REVISIONS

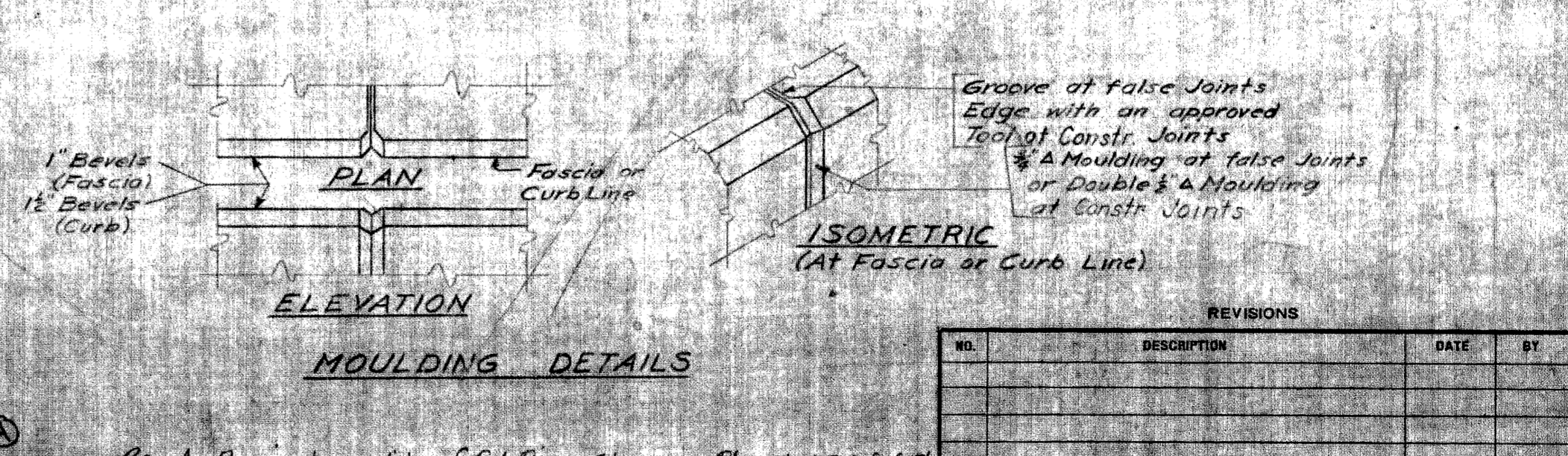
SHEET 3 OF 43
B72 OF 82-22-10



QUANTITIES CHARGEABLE TO DETROIT EDISON COMPANY		
ITEM	UNIT	AMOUNT
5" 61 PIPE SLEEVES-PLACED	EACH	48

GRADE A(B) CONCRETE QUANTITIES					
POUR	LOCATION	CU. YDS.	POUR	LOCATION	CU. YDS.
A-1	SLAB	9.7	D-1	SLAB	17.7
A-2	"	15.4	D-2	"	27.7
A-3	"	15.4	D-3	"	27.7
A-4	"	8.5	D-4	"	16.1
B-1	SLAB	9.6	E-1	SIDEWALK	6.2
B-2	"	15.4	E-2	"	11.6
B-3	"	13.4	E-3	"	11.7
B-4	"	8.6	E-4	"	5.9
C-1	SLAB	18.0	F-1	SIDEWALK	6.4
C-2	"	27.7	F-2	"	14.8
C-3	"	27.7	F-3	"	14.7
C-4	"	16.2	F-4	"	6.9

MISCELLANEOUS QUANTITIES		
ITEMS	UNIT	AMOUNT
12"x12" STRUCTURAL TILE	EACH	1395
1/2 JOINT FILLER	SQ. FT.	1750
3/4 JOINT FILLER	SQ. FT.	105
HOT-POURED RUBBER TYPE FILR	LIN. FT.	200
COPPER	LBS.	228
BRIDGE PAINTING, FABRICATION, ERECTION & PAINTINGS	LIN. FT.	338.8
RUBBED SURFACE FINISH	SQ. FT.	885
BIT BOND COAT, AE-2	GALS.	125
2" BIT CONC. WEARING COURSE	TONS	91
4" FIBER CONDUIT (D.S.R.)	LIN. FT.	1030
4" FIBER CONDUIT (P.L.C.)	LIN. FT.	2060
3" FIBER CONDUIT (P.L.C.)	LIN. FT.	100
5" 61 PIPE SLEEVES-PLACED	EACH	48



Work this Sheet with Sheet Nos. 11, 12, 13, & 14

MICHIGAN STATE HIGHWAY DEPARTMENT
CHARLES M. ZIEGLER
 STATE HIGHWAY COMMISSIONER
 THE EDEL FORD EXPRESSWAY CROSSING FRENCH ROAD IN THE CITY OF DETROIT

SUPERSTRUCTURE DETAILS

HAZLET & BERDAL CONSULTING ENGINEERS-FILE # 785

APPROVED: *J. C. Truher* 4.23.56
 CHIEF BRIDGE DRAFTSMAN

APPROVED: *[Signature]*
 ENGINEER OF BRIDGE DESIGN

APPROVED: _____
 BRIDGE ENGINEER

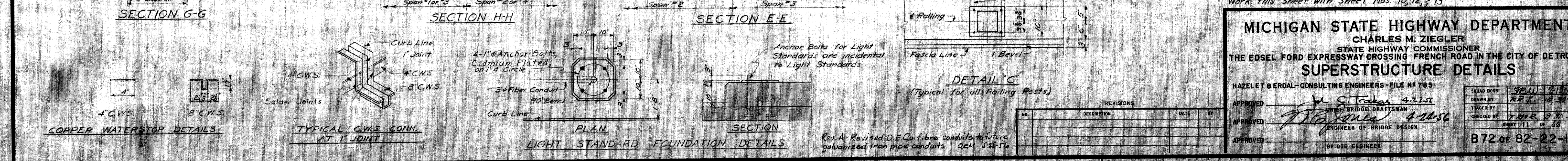
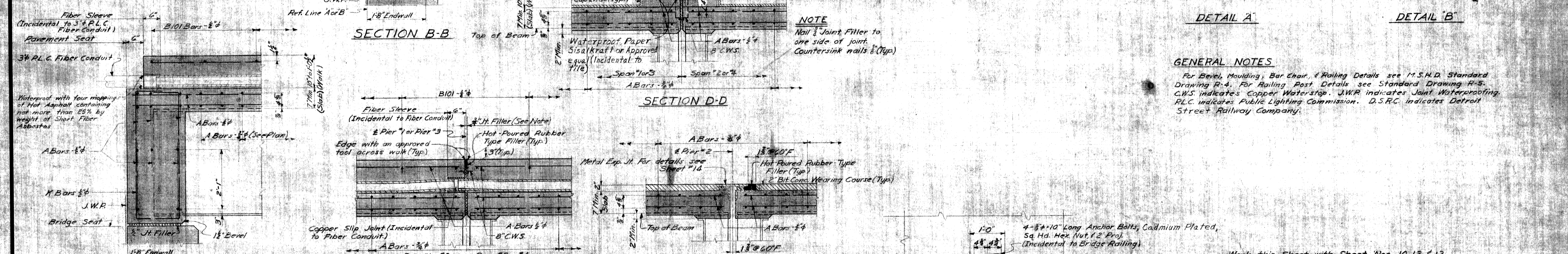
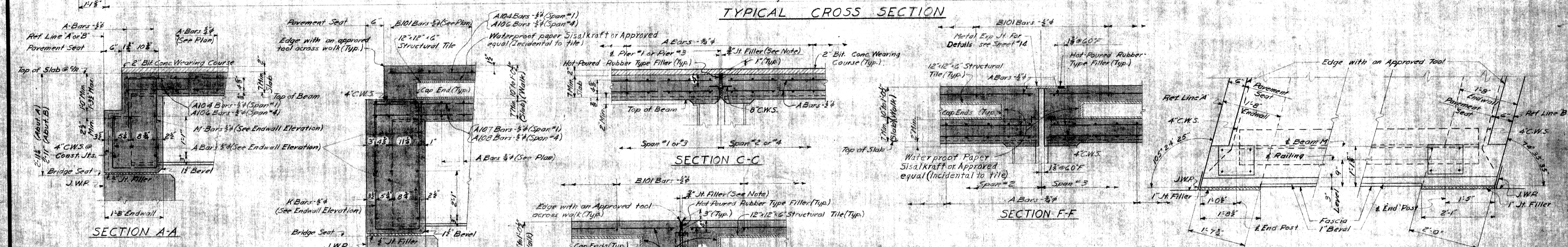
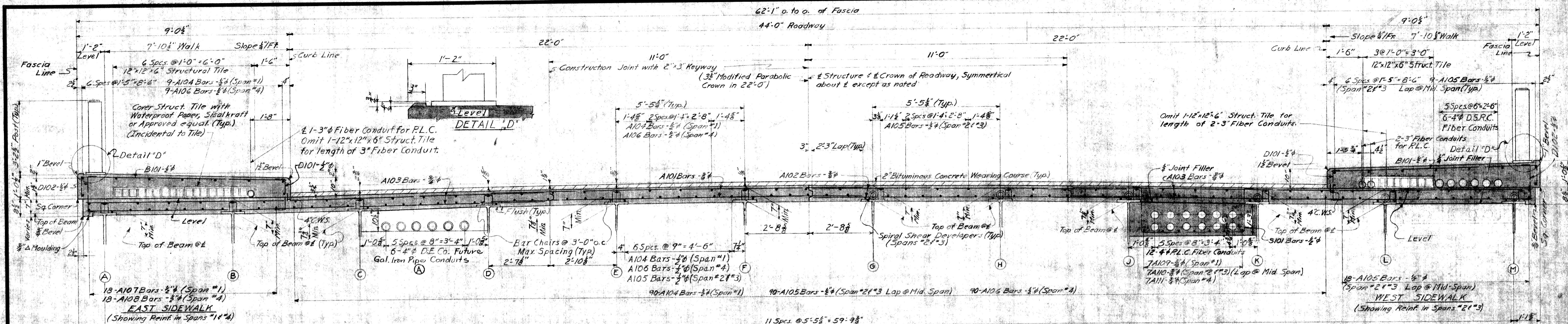
REVISIONS

NO.	DESCRIPTION	DATE	BY

SHEET 10 OF 16
 B72 OF 82-22-10

TOTAL SUPERSTRUCTURE GRADE A(B) CONCRETE = 976.5 CU. YDS.

Rev. A Revised quantity of 61 Pipe Sleeves-Placed DEM 5/15/56



Work this Sheet with Sheet Nos. 10, 12 & 13

MICHIGAN STATE HIGHWAY DEPARTMENT
CHARLES M. ZIEGLER
STATE HIGHWAY COMMISSIONER
THE EDSSEL FORD EXPRESSWAY CROSSING FRENCH ROAD IN THE CITY OF DETROIT
SUPERSTRUCTURE DETAILS

HAZELT & ERDAL-CONSULTING ENGINEERS-FILE NO 785

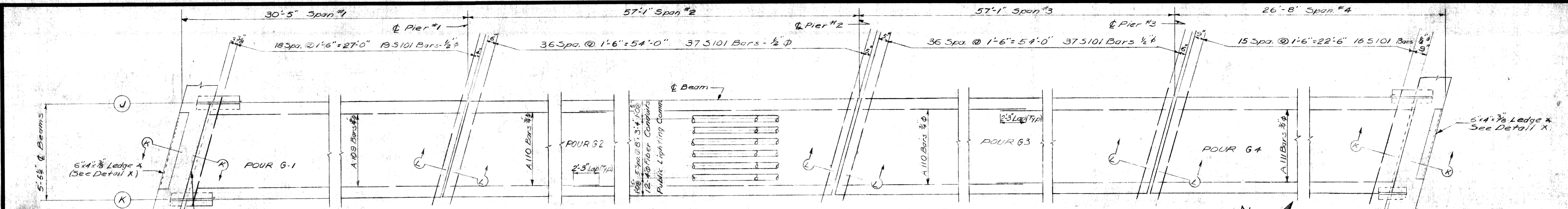
APPROVED: *H. C. Trakas* 4-23-56
DRAWN BY: *R.R.J.* 10-30-55
CHECKED BY: *T.H.R.* 10-31-55
APPROVED: *J.P. Jones* 4-26-56
ENGINEER OF BRIDGE DESIGN

REVISIONS

NO.	DESCRIPTION	DATE	BY

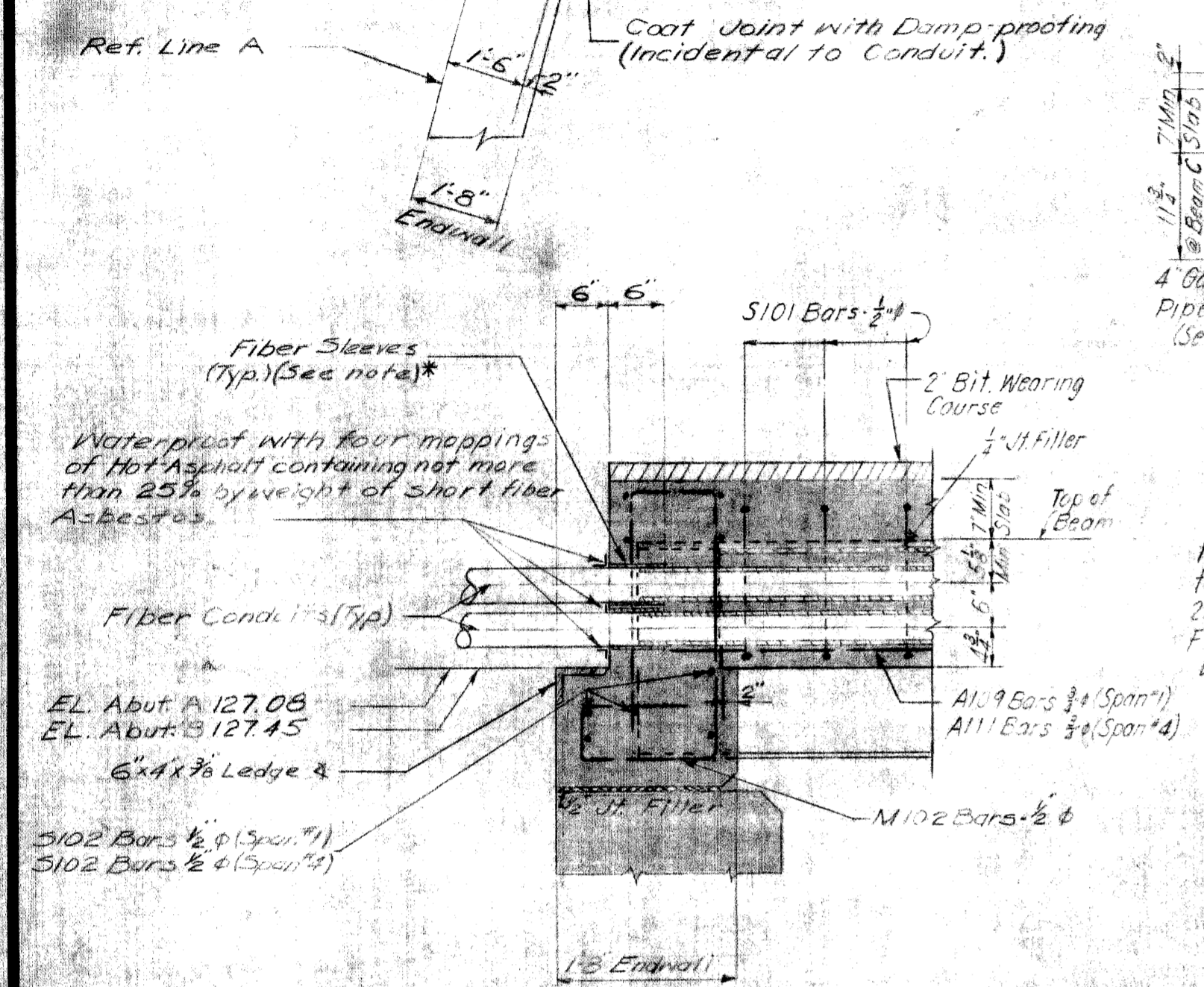
BRIDGE ENGINEER

B72 of 82-22-10



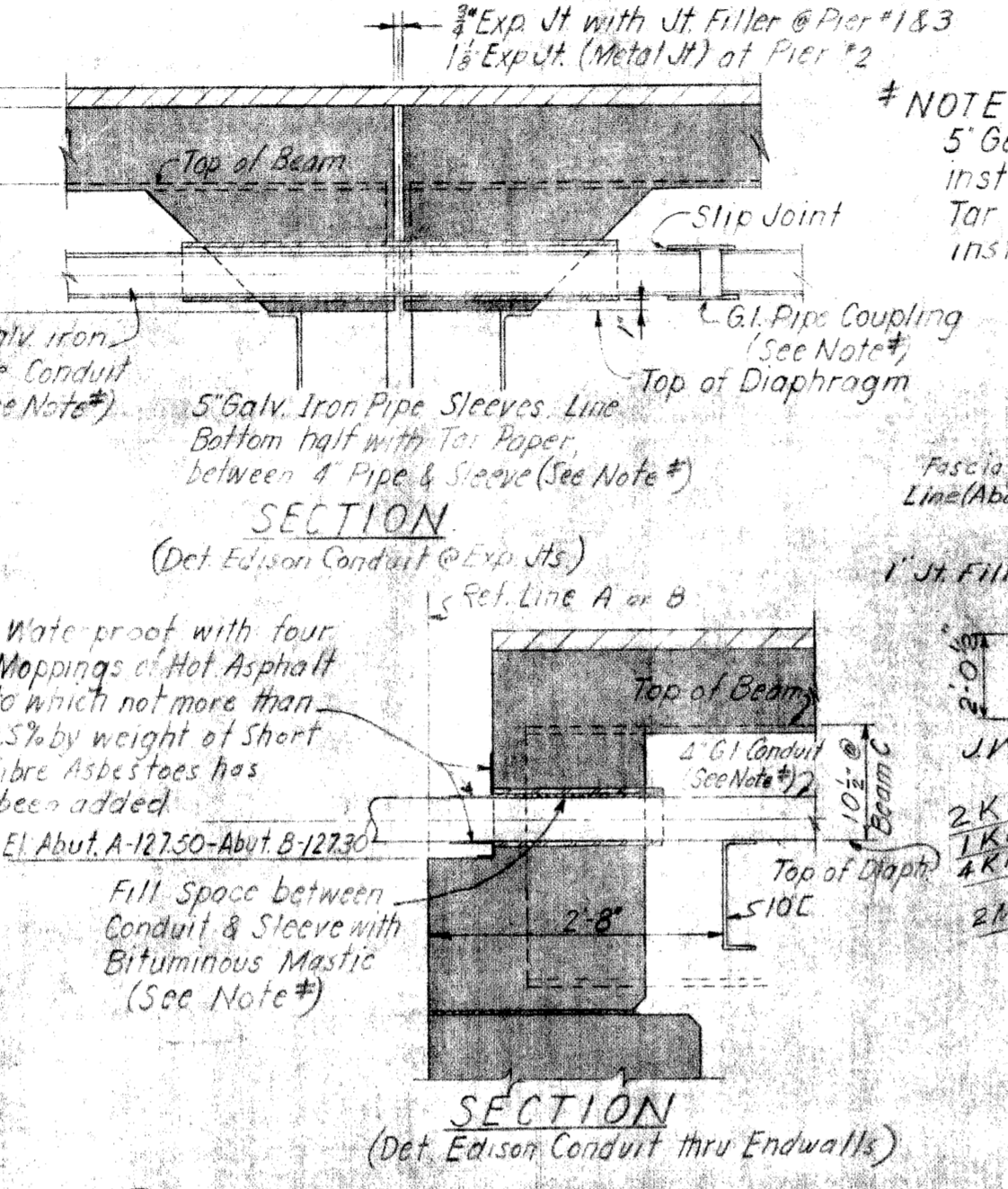
PLAN-CONDUIT ENCASEMENT AT BEAMS J & K

NOTE
5 Galv. Iron Pipe Sleeves to be furnished by Detroit Edison Co and installed by the Bridge Contractor. 4 G.I. Pipe Couplings, Tar Paper, Waterproofing and Bituminous Mastic to be furnished and installed by the Detroit Edison Co. in the future.



SECTION K-K

(For Reinf. & Details not shown or noted see Section A-A, Sheet No. 11.)

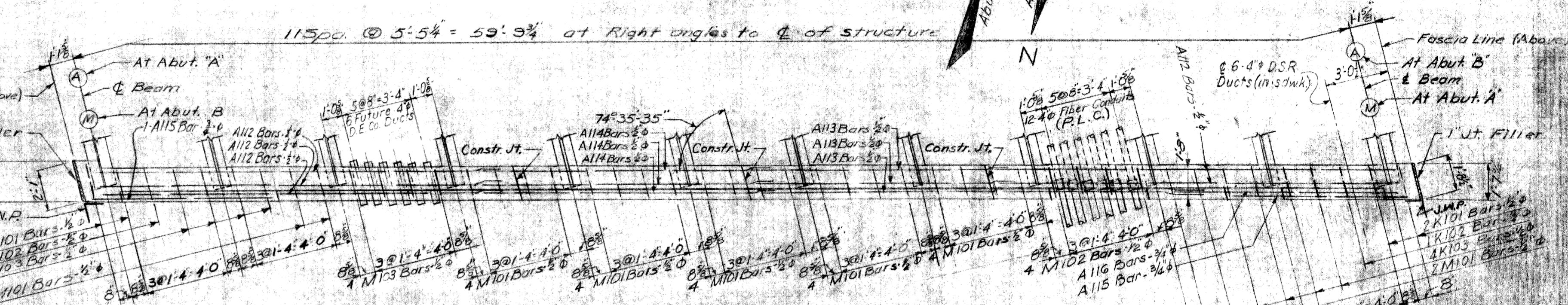


SECTION

(Det. Edison Conduit thru Endwalls)

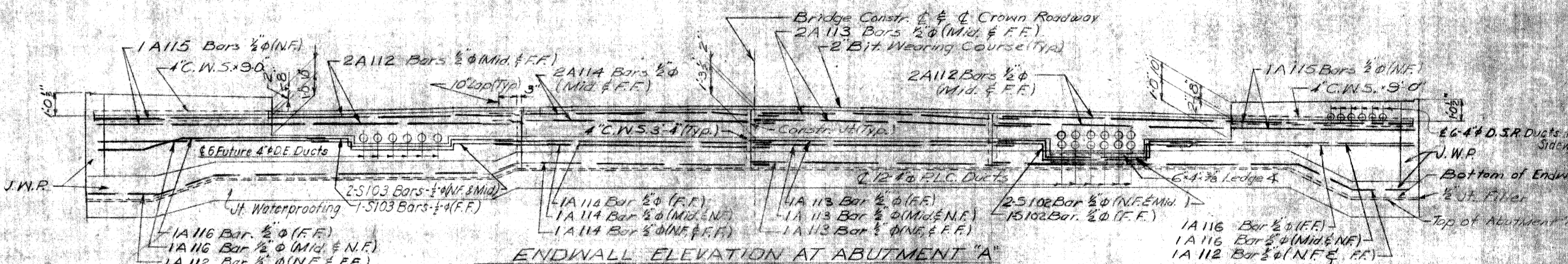
NOTE:

The minimum slab thickness is 7" and is adjusted to allow for Transverse, Crown, Vertical Curve, dead load deflection & Pie-Comber. For Camber see Sheet No. 16. Particular care shall be taken in determining header elevations. Slab thickness shall be adjusted as required, if objectionable voids or if camber exists, where no camber is specified. All Elevations are to top of concrete screed as shown before pouring any concrete.



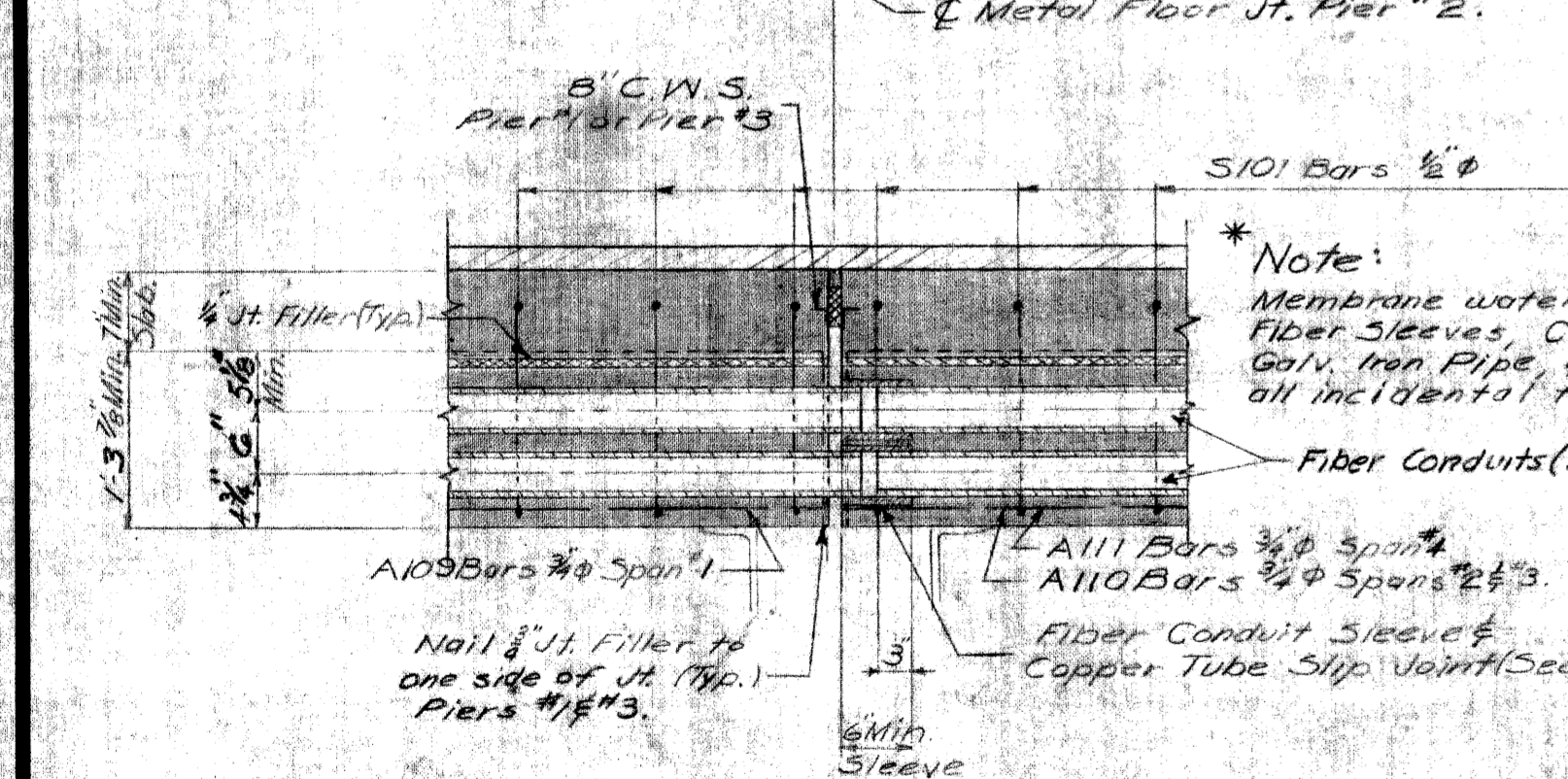
SECTIONAL PLAN OF ENDWALL AT ABUTMENT A

(Endwall at Abutment B similar except as noted.)



ENDWALL ELEVATION AT ABUTMENT A

(Endwall at Abutment B similar except as noted.)



SECTION L-L

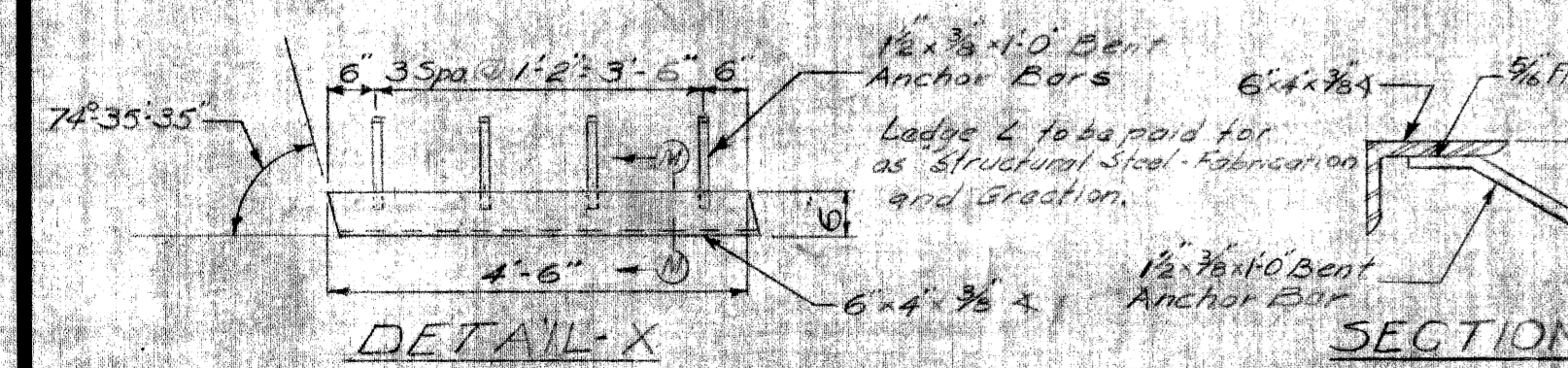
(For Reinf. and Details not shown or noted see Section C-C or E-E, Sheet No. 11.)

SLAB THICKNESS DIAGRAMS

Span	Pier	Top of Beam A @ E	Top of Beam C @ C	Top of Beam D @ D
30'-5" Span #1	Pier #1	7' 12 1/2" 129.17	7' 12 1/2" 129.34	7' 12 1/2" 129.51
57'-1" Span #2	Pier #2	7' 12 1/2" 129.60	7' 12 1/2" 129.76	7' 12 1/2" 129.92
57'-1" Span #3	Pier #3	7' 12 1/2" 130.11	7' 12 1/2" 130.27	7' 12 1/2" 130.43
26'-8" Span #4		7' 12 1/2" 130.94	7' 12 1/2" 131.10	7' 12 1/2" 131.26

SLAB THICKNESS DIAGRAMS

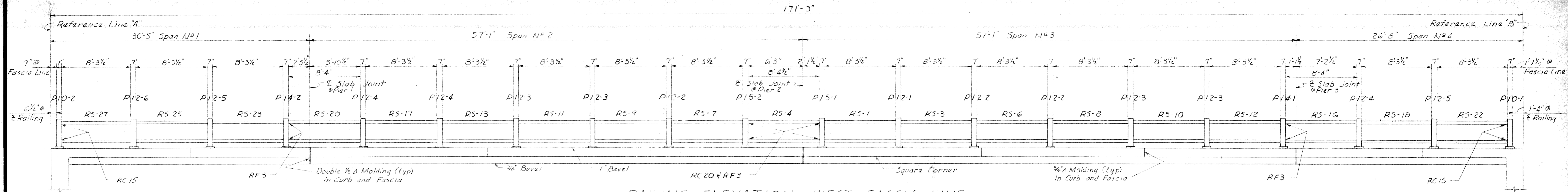
Span	Pier	Top of Beam G @ G	Top of Beam H @ H	Top of Beam I @ I
30'-5" Span #1	Pier #1	7' 12 1/2" 129.07	7' 12 1/2" 129.23	7' 12 1/2" 129.39
57'-1" Span #2	Pier #2	7' 12 1/2" 129.76	7' 12 1/2" 129.92	7' 12 1/2" 130.08
57'-1" Span #3	Pier #3	7' 12 1/2" 130.41	7' 12 1/2" 130.57	7' 12 1/2" 130.73
26'-8" Span #4		7' 12 1/2" 131.36	7' 12 1/2" 131.52	7' 12 1/2" 131.68



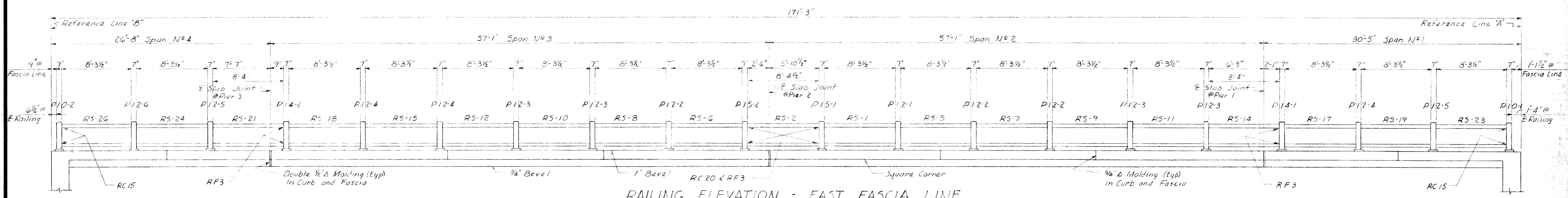
DETAIL X

SECTION M-M

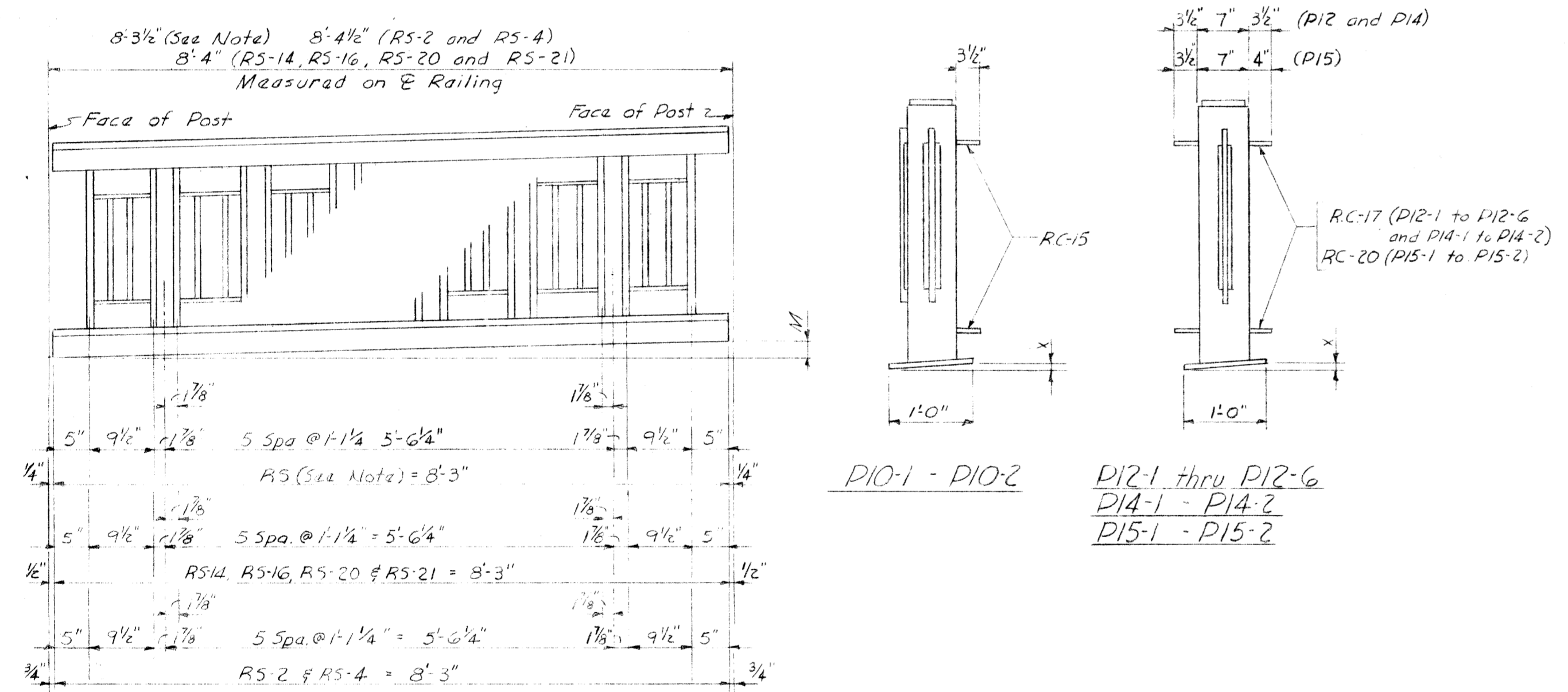
MICHIGAN STATE HIGHWAY DEPARTMENT
 CHARLES M. ZIEGLER
 STATE HIGHWAY COMMISSIONER
 THE EDEL FORD EXPRESSWAY CROSSING FRENCH ROAD IN THE CITY OF DETROIT
SUPERSTRUCTURE DETAILS
 HAZLET & ERDAL-CONSULTING ENGINEERS-FILE # 785
 APPROVED: [Signature] 4-22-56
 CHIEF BRIDGE DRAFTSMAN
 APPROVED: [Signature] 4-22-56
 ENGINEER OF BRIDGE DESIGN
 APPROVED: [Signature]
 BRIDGE ENGINEER
 SHEET 12 OF 16
 B72 of 82-22-10



RAILING ELEVATION - WEST FASCIA LINE

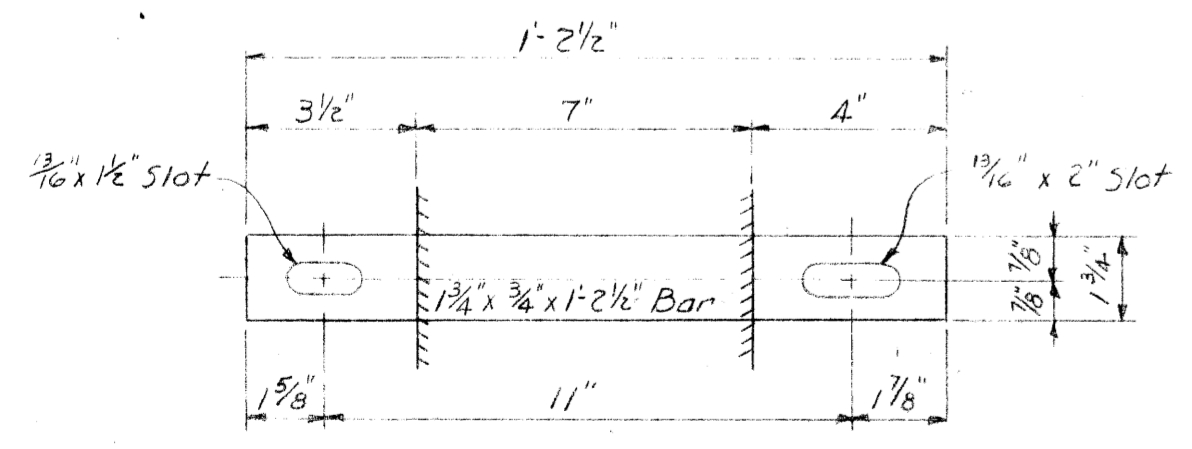


RAILING ELEVATION - EAST FASCIA LINE



RAILING SECTION

NOTE:
 RS-1, RS-3, RS-5 thru RS-13; RS-15; RS-17 thru RS-19
 and RS-22 thru RS-27 = 8'-3" (End to end of Railing)
 8'-3" (Face to face of Posts)



RC-20 RAILING CLIP
(8 Required)

NOTES:
 • Post P15 is the same as P14 except RC-20
 Clips are used on P15.
 • All Railing Flanges to be RF-4 and all Railing Clips,
 to be RC-17, unless otherwise noted.
 • For Railing, Molding, and Bevel details not shown hereon,
 see M.S.H.D. Standard Drawing R-4.
 • For Railing Posts, Railing Clip, and Railing Flange details
 not shown, see M.S.H.D. Standard Drawing R-5.

BILL OF RAILING MATERIALS						
MARK	NO.	"M"	DESCRIPTION	MARK	"X"	DESCRIPTION
RS-1	2	0	RAILING SECTION	P10-1	2	1/4" RAILING POST
RS-2	1	3/16"	"	P10-2	2	3/16" "
RS-3	1	3/16"	"	"	"	"
RS-4	1	5/16"	"	P12-1	2	0" "
RS-5	1	3/16"	"	P12-2	6	1/16" "
RS-6	2	1/2"	"	P12-3	8	1/8" "
RS-7	2	3/16"	"	P12-4	6	3/16" "
RS-8	2	3/4"	"	P12-5	4	1/4" "
RS-9	2	7/8"	"	P12-6	2	5/16" "
RS-10	2	1"	"	"	"	"
RS-11	2	1 1/8"	"	P14-1	2	3/16" "
RS-12	2	1 1/4"	"	P14-2	2	1/4" "
RS-13	1	1 3/8"	"	"	"	"
RS-14	1	1 3/8"	"	P15-1	2	0" "
RS-15	1	1 1/2"	"	P15-2	2	1/2" RAILING POST
RS-16	1	1 1/4"	"	"	"	"
RS-17	2	1 3/8"	"	"	"	"
RS-18	2	1 3/8"	"	RC-15	8	RAILING CLIP
RS-19	1	1 3/8"	"	RC-17	64	"
RS-20	1	1 3/8"	"	RC-20	8	"
RS-21	1	2 1/4"	"	"	"	"
RS-22	1	2 1/4"	"	RF-3	16	RAILING FLANGE
RS-23	1	2 3/8"	"	RF-4	136	"
RS-24	1	2 3/8"	"	"	"	"
RS-25	1	2 3/8"	"	"	"	"
RS-26	1	2 3/8"	"	BOLTS	152	3/4" x 2 1/4" HEX HD BOLTS
RS-27	1	2 3/8"	RAILING SECTION	WASHERS	152	3/4" LOCK WASHERS
				LEADERS	40	6 LEADERS or FAREEKA ALT.
				ANCHOR BOLTS	160	3/4" x 10" BOLTS GALV. PLATED ST. HD. HEX NUT PROJECT 2"

* APPROXIMATE TOTAL RAILING WEIGHT = 22,140 #

* Not included in structural steel weight.
 * Voids between posts & railing posts to be caulked with lead wool (optional)

Work this Sheet with Sheet No. 10, 11 & 12

MICHIGAN STATE HIGHWAY DEPARTMENT
 CHARLES M. ZIEGLER
 STATE HIGHWAY COMMISSIONER
 THE EDSSEL FORD EXPRESSWAY CROSSING FRENCH ROAD IN THE CITY OF DETROIT

RAILING DETAILS

HAZELET & BERDAL-CONSULTING ENGINEERS-FILE # 785

APPROVED: *[Signature]* 4-23-55
 CHIEF BRIDGE DRAFTSMAN

APPROVED: *[Signature]* 4-28-56
 ENGINEER OF BRIDGE DESIGN

APPROVED: _____
 BRIDGE ENGINEER

REVISIONS

NO.	DESCRIPTION	DATE	BY

SQUAD BOSS: *[Signature]* 2-13-56
 DRAWN BY: J.L.G. 8-17-55
 CHECKED BY: T.M.E. 8-20-55
 SHEET 13 OF 46
 B72 OF 82-22-10